˥ or ~ negation

˄ AND

˅ OR

Resolution

Its an iterative process in which 2 clauses called parent clause are compared (resolved) yielding a new clause

1. **Convert Fact into first order logic (FOL)**

Sunny ˄ warm -> Enjoy

Rainy -> wet

Warm

Rainy

sunny

1. convert Fol to CNF (conjunctive normal form)

˥ Sunny ˅ ˥ warm ˅ Enjoy

˥ Rainy ˅ wet

Warm

Rainy

sunny

1. **Negate the statement to be proved**

˥ Enjoy

1. **Draw resolution graph**

Sunny ˄ warm -> Enjoy

Rainy -> wet

Warm

Rainy

sunny

Enjoy

1. (Sunny ˄ Warm) -> Enjoy

˥(Sunny ˄ Warm) v Enjoy

˥Sunny v ˥Warm v Enjoy

1. Rainy -> wet ˥ Rainy v wet
2. Warm Warm
3. Rainy Rainy
4. Sunny Sunny

Sunny

Rainy

Warm

Wet

Enjoy

Sunny ˄ warm -> enjoy

Rainy -> wet

Warm

Rainy

Sunny

1. ˥(Sunny ˄ warm) v enjoy ˥sunny v ˥warm v enjoy

˥ Rainy v wet

Warm

Rainy

sunny

1. (Sunny ˄ Warm) -> Enjoy ˥(Sunny ˄ Warm) v Enjoy ˥ Enjoy
2. Rainy -> wet ˥ Rainy v wet
3. Warm Warm
4. Rainy Rainy
5. Sunny Sunny



1. ˥enjoy ˥sunny v ˥warm v enjoy





˥sunny v ˥warm Warm

˥sunny Sunny



Blank or empty set

˥enjoy is false

U will enjoy

